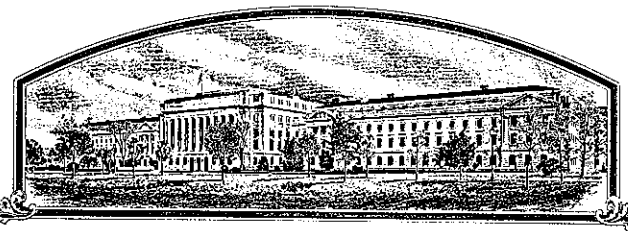
No. 8200183



THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

D. J. van der Have B.V.

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF eighteen YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

CHEWINGS RED FESCUE

'Contour'

In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington this 28th day of February in the year of our Lord one thousand nine hundred and eighty-three.

Attest:

Kenneth A. Evans
Acting
Commissioner
Plant Variety Protection Office
Grain Division
Agricultural Marketing Service

John R Block
Secretary of Agriculture

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
LIVESTOCK, MEAT, GRAIN & SEED DIVISION

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

(Instructions on reverse)

FORM APPROVED: OMB NO. 0581-0055

No certificate for plant variety protection may be issued unless a completed application form has been received (5 U.S.C. 553).

1. NAME OF APPLICANT(S)	2. TEMPORARY DESIGNATION	3. VARIETY NAME
Koninklijk Kweekbedrijf en Zaadhandel D.J. van der Have B.V.	HF 29	C O N T O U R

4. ADDRESS *(Street and No. or R.F.D. No., City, State, and Zip Code)*	5. PHONE *(Include area code)*
P.O. Box 1 4420 AA Kapelle Netherlands	1135-1254

FOR OFFICIAL USE ONLY

PVPO NUMBER: 8200183

6. GENUS AND SPECIES NAME	7. FAMILY NAME *(Botanical)*
Festuca rubra ssp. commutata	-

FILING DATE: 9/22/82
TIME: 11:30 [X] A.M. [ ] P.M.

8. KIND NAME	9. DATE OF DETERMINATION
Chewings red fescue	1976

FEES RECEIVED
AMOUNT FOR FILING: $ 500.00
DATE: 9/22/82
AMOUNT FOR CERTIFICATE: $ 250.00
DATE: 1/25/83

10. IF THE APPLICANT NAMED IS NOT A "PERSON," GIVE FORM OF ORGANIZATION *(Corporation, partnership, association, etc.)*
Corporation

11. IF INCORPORATED, GIVE STATE OF INCORPORATION	12. DATE OF INCORPORATION
Netherlands	8th March 1973

13. NAME AND ADDRESS OF APPLICANT REPRESENATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS
Mr. Stan Rollin
6802 Orem Drive
Laurel Maryland ~~20810~~ 20707

14. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED

a. [X] Exhibit A, Origin and Breeding History of the Variety *(See Section 52 of the Plant Variety Protection Act.)*
b. [X] Exhibit B, Novelty Statement
c. [X] Exhibit C, Objective Description of the Variety *(Request form from Plant Variety Protection Office.)*
d. [X] Exhibit D, Additional Description of the Variety

15. DOES THE APPLICANT(S) SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY VARIETY NAME ONLY AS A CLASS OF CERTIFIED SEED? *(See Section 83(a) of the Plant Variety Protection Act.)* [ ] Yes *(If "Yes," answer items 16 and 17 below)* [X] No

16. DOES THE APPLICANT(S) SPECIFY THAT THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS? [X] Yes [ ] No

17. IF "YES" TO ITEM 16, WHICH CLASSES OF PRODUCTION BEYOND BREEDER SEED? [ ] Foundation [ ] Registered [X] Certified

18. DID THE APPLICANT(S) FILE FOR PROTECTION OF THE VARIETY IN THE U.S. OR OTHER COUNTRIES?

Netherlands	1977-11-9
United Kingdom	1977-11-17

[X] Yes *(If "Yes," give names of countries and dates)*
[ ] No

19. HAVE RIGHTS BEEN GRANTED IN THE U.S. OR OTHER COUNTRIES?

Netherlands	1981-11-11
United Kingdom	1982- 4-22

[X] Yes *(If "Yes," give names of countries and dates)*
[ ] No

20. The applicant(s) declare(s) that a viable sample of basic seeds of this variety will be furnished with the application and will be replenished upon request in accordance with such regulations as may be applicable.

The undersigned applicant(s) is (are) the owner(s) of this sexually reproduced novel plant variety, and believe(s) that the variety is distinct, uniform, and stable as required in Section 41, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act.

Applicant(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.

SIGNATURE OF APPLICANT	DATE
D.J. van der Have.	
SIGNATURE OF APPLICANT	DATE
[signature]	1982-9-14.

INSTRUCTIONS

General: Send an original copy of the application and exhibits, at least 2,500 viable seeds, and $500 fee (*$250 filing fee and $250 examination fee*) to U.S. Department of Agriculture, Agricultural Marketing Service, Livestock, Meat, Grain and Seed Division, Plant Variety Protection Office, National Agricultural Library Building, Beltsville, Maryland 20705. *(See section 180.175 of the Regulations and Rules of Practice.)* Retain one copy for your files. All items on the face of the form are self-explanatory unless noted below.

Item

9 Give the date the applicant determined that he had a new variety based on (1) the definition in section 41(a) of the Act and (2) the date a decision was made to increase the seed.

14a Give: (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method; (2) the details of subsequent stages of selection and multiplication; (3) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified and (4) evidence of uniformity and stability.

14b Give a summary statement of the variety's novelty. Clearly state how this novel variety may be distinguished from all other varieties in the same crop. If the new variety most closely resembles one or a group of related varieties: (1) identify these varieties and state all differences objectively; (2) attach statistical data for characters expressed numerically and demonstrate that these differences are significant; and (3) submit, if helpful, seed and plant specimens or photographs of seed and plant comparisons clearly indicating novelty.

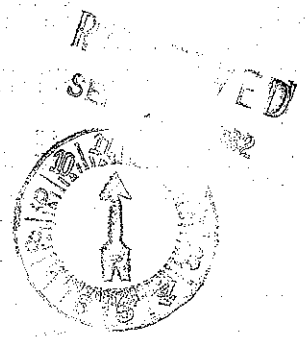
14c Fill in the Exhibit C, Objective Description form, for all characteristics for which you have adequate data.

14d Describe any additional characteristics that are not described, or whose description cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the description of characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc.

15 If "Yes" is specified *(seed of this variety be sold by variety name only as a class of certified seed)* the applicant may NOT reverse his affirmative decision after the variety has either been sold and so labeled, his decision published, or the certificate has been issued. However, if the applicant specified "No," he may change his choice. *(See section 180.16 of the Regulations and Rules of Practice.)*

16 See section 42 of the Plant Variety Protection Act and section 180.7 of the Regulations and Rules of Practice.

GPO 890-698



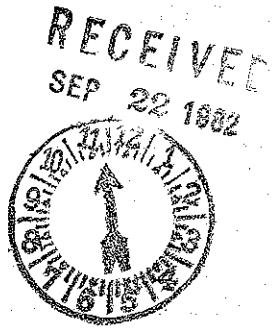


Exhibit A. Origin and Breeding History of the Variety.

In 1969 seed of red fescue plants was collected in Limburg (south-east of the Netherlands). About 100 ecotypes were collected.

Plants were raised from this seed and planted as spaced plants. Experimental varieties were developed out of this material by putting together attractive and matching plants.

Syn-1 seed of the experimental varieties was produced in 1972. The experimental varieties were tested in various turf trials and in a seed yield trial. HF 29 emerged as a variety with a good turf quality and a high seed productivity.

In view of the favourable characteristics of HF 29 it was decided to multiply the variety further: Syn-2 seed was harvested in 1974.

Syn-1 and Syn-2 seed of HF 29 were compared as spaced plants in 1975 and 1976. No genetic shift had occurred during multiplication. No variants were observed in 2 generations of reproduction and the variety proved to be stable during 2 generation of reproduction.

In 1976 it was decided to produce enough breeders'seed of the anticipated need of the next 10 years and to release HF 29 under the varietal name Contour.

Length of flag leaf (mm)

Year	Replicate	Contour	Highlight	Jamestown	LSD 0.01
1979	I	89	68	101	
	II	102	71	94	
	III	97	68	95	
	Mean	96	69	97	10.8
1980	I	116	91	116	
	II	107	102	108	
	III	132	103	111	
	Mean	118	99	112	13.9
1981	I	127	89	108	
	II	134	95	108	
	III	135	95	107	
	Mean	132	93	108	15.0

Panicle length (mm)

Year	Replicate	Contour	Highlight	Jamestown	LSD 0.01
1979	I	129	97	113	
	II	127	103	120	
	III	105	91	113	
	Mean	120	97	115	17.6
1980	I	128	98	110	
	II	123	95	115	
	III	145	106	113	
	Mean	132	100	113	13.9
1981	I	107	76	121	
	II	108	83	117	
	III	122	91	120	
	Mean	112	83	120	10.6

Maturity (days after 31th March)

Year	Replicate	Contour	Highlight	Jamestown	LSD 0.01
1979	I	43	41	47	
	II	41	42	47	
	III	44	42	49	
	Mean	43	42	48	2.1
1980	I	36	33	44	
	II	37	32	45	
	III	34	29	43	
	Mean	36	31	44	2.5
1981	I	31	31	40	
	II	30	29	41	
	III	32	28	41	
	Mean	31	29	41	3.0

Exhibit B. Novelty Statement.

most closely and Jamestown. RPW 12/3/82

Contour resembles Highlight, ~~but~~ Contour is different from Highlight in the following characteristics. 1

- Width of flag leaf.

  The width of the flag leaf of Contour is 0.9 mm wider than that of Highlight. This difference was significant at P = 0.01 in 1979, 1980 and 1981.

- Length of flag leaf.

  The length of the flag leaf of Contour is 25 mm longer than that of Highlight. This differences was significant at P=0.01 in 1979, 1980 and 1981.

- Length of panicle

  The lenght of the panicle of Contour is 28 mm longer than that of Highlight. This difference was significant at P=0.01 in 1979, 1980 and 1981.

RPW 12/3/82

~~Contour resembles Jamestown, but~~ Contour is different from Jamestown in the following characteristics:

- Maturity
  Contour is 7 days earlier than Jamestown. This difference was significant at P=0.01 in 1979, 1980 and 1981.

Data provided by RIVRO/Wageningen.
Measured on 60 new plants each year.

Width of flag leaf (mm)

Year	Replicate	Contour	Highlight	Jamestown	LSD 0.01
1979	I	2.9	2.0	2.6	
	II	2.8	1.8	2.5	
	III	2.8	1.9	2.4	
	mean	2.8	1.9	2.5	0.24
1980	I	2.7	1.9	1.9	
	II	2.6	1.7	1.7	
	III	2.7	1.6	2.0	
	Mean	2.7	1.7	1.8	0.23
1981	I	2.3	1.5	2.0	
	II	2.4	1.4	2.2	
	III	2.5	1.4	2.2	
	Mean	2.4	1.4	2.2	0.48

./.

FORM APPROVED: OMB NO. 0581-0055

EXHIBIT C
(Fine Leaved Fescues)

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
LIVESTOCK, MEAT, GRAIN & SEED DIVISION
PLANT VARIETY PROTECTION OFFICE
BELTSVILLE, MARYLAND 20705

OBJECTIVE DESCRIPTION OF VARIETY
FINE LEAVED FESCUES
(Festuca spp.)

NAME OF APPLICANT(S)	TEMPORARY DESIGNATION	VARIETY NAME
Koninklijk Kweekbedrijf en Zaadhandel D.J. van der Have B.V.	HF 29	C O N T O U R

ADDRESS *(Street and No. or R.F.D. No., City, State, and Zip Code)*
P.O. Box 1
4420 AA Kapelle Netherlands

FOR OFFICIAL USE ONLY
PVPO NUMBER 8200183

Place the appropriate number that describes the varietal character of this variety in the boxes below. Use leading zeroes when necessary (e.g., [0][8][9] or [0][9]). Characteristics described including numerical measurements, should represent those that are typical for the variety. Measured data should be for SPACED PLANTS. Royal Horticultural Society or any recognized color fan may be used to determine plant colors; designate system used: RIVRO system Describe location of test area, conditions and number of plants used: Wageningen Netherlands, 60 plants each year during 3 consecutive years

1. SPECIES: (With comparison varieties for use below - use varieties within species of application variety)

[1]

1 = *F. rubra ssp. commutata* (Chewings) — 11 = Cascade, 14 = Banner, 12.= Highlight, 15 = Barfalla, 13 = Jamestown
2 = *F. rubra* ssp. *litoralis* (Creeping Red) — 21 = Dawson, 24 = Pennlawn, 22 = Starlight, 23 = Merlin
3 = *F. rubra* ssp. *rubra* (Spreading Red) — 31 = Boreal, 34 = Ensylva, 32 = Ruby, 33 = Fortress
4 = *F. ovina* (Sheep) — 41 = Covar
5 = *F. longifolia* (Hard) — 51 = Durar, 52 = Biljart (C-26), 53 = Scaldis
6 = *F. tenuifolia* (Fine-Leaved Sheep) — 61 = Panda, 62 = Barok
7 = Other *(Specify)* *F.* _____

2. CYTOLOGY:

[4][2] Chromosome Number [3] Ploidy — 1 = diploid, 2 = tetraploid, 3 = hexaploid, 4 = octoploid

3. ADAPTATION: (0 = Not Tested; 1 = Not Adapted; 2 = Adapted)

[2] Northeast [2] Southeast [2] North Central [2] Pacific N.W. [ ] Other *(Specify)* _____

4. MATURITY: Date First Headed (panicle emergence) Location(s) of Trail(s) Wageningen (51° North L.)

[2]

Maturity Class:
1 = Very Early (Covar) — 2 = Early (Highlight) — 3 = Medium Early (Boreal, Dawson)
4 = Medium Late (Cascade, Ruby) — 5 = Late (Jamestown, Agram) — 6 = Very Late

Date Headed _____

[ ][7] Days earlier than . . . . . [1][3]
Maturity same as . . . . . [ ][ ]
[ ][3] Days later than . . . . . [1][2]
} Comparison Variety

5. PLANT HEIGHT: (At maturity; to top of panicle; Average of 10 tallest culms)

[8][2][0] mm height
[ ][ ][ ] mm shorter than . . . . . [ ][ ]
Height same as . . . . . [1][3]
[ ][7][0] mm taller than . . . . . [1][2]
} Comparison Variety

6. GROWTH HABIT: (Mature)

[2] 1 = Erect (Ruby) 2 = Semi-erect (Highlight) 3 = Prostrate (Silvana)

7. RHIZOMES:

[ ][ ][ ] mm Length [ ][ ] mm Width [ ][ ] mm Internode length

[0] 1 = Absent (Highlight) 2 = Weakly Creeping (Dawson) 3 = Strongly Creeping (Boreal)
4 = Very Strongly Creeping (Fortress)

8. LEAF BLADE:

[3] Color: 1 = Light Green (Starlight) 2 = Medium Light Green (Highlight) 3 = Medium Dark Green (Ruby, Agram) 4 = Dark Green (Jamestown, Manoir) 5 = Bluegreen (Saphir) 6 = Graygreen (Scaldis) 7 = Other *(Specify)* _____

[1] Glaucosity (Sowing Year): 1 = Absent (Koket) 2 = Present (Vendome)

[ ] Anthocyanin: 1 = Absent 2 = Present [ ] Hairs (Basal) 1 = Absent 2 = Present

[ ] Margins: 1 = Smooth 2 = Semi-rough 3 = Rough

[1] Margin folding (closure): 1 = Rolled inward (closed-Highlight) 2 = Flat (open-Jamestown, Engina)

[2] Width class:
1 = Very Fine (Agram, Frida) 2 = Fine (Jamestown, Highlight, Banner, Dawson)
3 = Medium Fine (Fortress, Ruby, Scaldis) 4 = Medium Coarse (Engina)

[1][1][5] mm Length (flag leaf)

[ ][ ] mm Shorter than . . . . . [ ][ ]

Blade length same as . . . . . [ ][ ] } Comparison Variety

[2][5] mm Longer than . . . . . [1][2]

[2][6][ ] mm Width (flag leaf)

[ ][ ][ ] mm Narrower than . . . . . [ ][ ]

Blade width same as . . . . . [ ][ ] } Comparison Variety

[0][9][ ] mm Wider than . . . . . [1][2]

9. LEAF SHEATH:

[2] Anthocyanin (seedling): 1 = Absent (Highlight) 2 = Present (Jamestown, Fortress, Marga)

[ ] Auricle Hairiness: 1 = Absent 2 = Present

[ ] Margins: 1 = Open (Highlight) 2 = Closed (Jamestown)

10. PANICLE (Mature plant):

[ ] Shape: 1 = Narrow-tapering 2 = Ovate 3 = Oblong 4 = Other *(Specify)* _____

[ ] Type: 1 = Open 2 = Intermediate 3 = Compact

[ ] Orientation: 1 = Erect 2 = Nodding

[ ] Branch Pubescence: 1 = Glabrous 2 = Pubescent

[ ] Anther Color:

[ ] Glume Color (At 50% flowering): } 1 = Yellowish Green 2 = Green 3 = Bluish Green 4 = Purplish 5 = Reddish 6 = Other *(Specify)* _____

[1][2][2] mm Length

[ ][ ] mm Shorter than . . . . . [ ][ ]

Panicle length same as . . . . . [ ][ ] } Comparison Variety

[2][8] mm Longer than . . . . . [1][2]

11. PALEA:

[ ] Hairs (On keels or margins): 1 = Absent (Banner) 2 = Short (Agram, Scaldis, Olds) 3 = Long (Rainier, Fortress, Jamestown)

12. LEMMA (Mature):

[ ] Hairs: 1 = Absent (Jamestown) 2 = Several 3 = Many (Highlight)

[5 4] mm Lemma Length

[ ] mm Shorter than . . . . . [ ]

Lemma length same as . . . . . [ ] Comparison Variety

[5] mm Longer than . . . . . [1 2]

[1 0 4] mm Lemma Width

[ ] mm Narrower than . . . . . [ ]

Lemma width same as . . . . . [ ] Comparison Variety

[0 0 8] mm Wider than . . . . . [1 2]

[2] Awns: 1 = Absent 2 = Present

[2 1] mm Awn Length

[0 4] mm Shorter than . . . . . [1 3]

Awn length same as . . . . . [ ] Comparison Variety

[0 1] mm Longer than . . . . . [1 2]

13. SEED (With lemma & palea):

[2] Size Class (g/1000 seed):
1 = <.9g (Biljart, Dawson) 2 = .9 – < 1.1g (Jamestown, Highlight)
3 = 1.1 – 1.3g (Fortress, Novorubra) 4 = >1.3g (Boreal, Golfrood)

[1 0 1 0] mg per 1000 seed

[ ] mg per 1000 seed less than . . . . . [ ]

Seed Weight same as . . . . . [ ] Comparison Variety

[1 1 0] mg per 1000 more than . . . . . [1 2]

14. DISEASE, INSECT, AND NEMATODE REACTION (0 = Not Tested, 1 = Susceptible, 2 = Resistant):

[0] Melting-out *Drechslera poae* (*Helminthosporium vagans*)
[0] Leaf spot *D. siccans*
[0] Net blotch *D. dictyoides*
[0] Leaf spot *Bipolaris sorokiniana*
[0] Brown patch *Rhizoctonia solani*
[2] Powdery mildew *Erysiphe graminis*
[0] Stripe smut *Ustilago striiformis*
[2] F. Patch, Pink snow-mold *Fusarium nivale*
[0] Fusarium blight *F. tricinctum, F. roseum*
[0] Gray snow mold *Typhula iotana*
[0] Stem rust *Puccinia graminis*
[0] Stripe rust *P. striiformis*
[0] Leaf rust *P. poae-nemoralis*
[0] *P. crandallii*
[0] Pythium Blight *Pythium ultimum*
[2] Red thread *Corticium fusciforme*
[0] Dollar spot *Sclerotinia homoeocarpa*
[0] Insect _____
[0] Nematode _____
[ ] Other _____
[ ] Other _____
[ ] Other _____

15. GIVE VARIETY OR VARIETIES THAT MOST CLOSELY RESEMBLE THE APPLICATION VARIETY. For the following characteristics indicate Degree of Resemblance by placing the column marked, D.R., one of the following numbers:

1 = Application variety is less than comparison variety. 2 = Same As
3 = More than, better, greater, darker, more disease resistant, etc.

CHARACTER	VARIETY	D.R.	CHARACTER	VARIETY	D.R.
Rhizome Length			Growth Habit	Jamestown	2
Leaf Width	Highlight	3	Leaf Color	Jamestown	1
Panicle Color			Panicle Shape		
Winter Color	Jamestown	3	Cold Injury		
Shade Tolerance			Heat		
Drought			Disease*		

* *Specify each disease evaluated.*

16. ADDITIONAL DESCRIPTION: (Use additional sheets as required)

Describe all characteristics that cannot be adequately described in the form above in Exhibit D. Comparative varieties should be used as may be appropriate, such as for disease. Append all comparative trial and evaluation data, including measured characters, environmental, and disease tests.

8

Exhibit D. Additional Description of the Variety.

Number of panicles /m^2 (mean of 3 replicates).

	Seeding time I (81/7/6)	Seeding time II (81/7/20)	Seeding time III (81/8/15)	Mean
Contour	6626	6280	4413	5773
Highlight	6333	5200	2400	4644

Contour has a higher number of panicles per m^2 than Highlight. In spite of the late sowing of Seeding time III, Contour still produces a high number of panicles. The juvenile stage of Contour thus is shorter than that of Highlight.